The U.S. household furniture industry: Status and opportunities

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Abstract

Over the past two decades, large sections of the domestic residential upholstered and nonupholstered furniture industry have relocated manufacturing operations to offshore countries with lower production costs. As a consequence, the U.S. market share of imported, nonupholstered wood household furniture has risen from 19 percent in 1992 to 64 percent in 2008 and imported, upholstered household furniture rose from 5 to 28 percent over the same period. While the U.S. furniture industry has struggled over the last two decades, current economic developments may provide the industry with an opportunity to alter its' fortunes as circumstantial evidence exist that some of the competitive advantages of offshore producers are weakening. For example, production costs in offshore manufacturing locations and transportation costs are increasing, the value of the U.S. Dollar is diminishing against trade partners' currencies, and the public perception on trade is growing less favorable. Also, some observers indicate that mass customized and green furniture will offer advantages for domestic furniture manufacturers. The authors argue that these ongoing changes in the global economy may have created an opportunity for domestic manufacturers to strengthen their competitive position and regain some of the losses incurred over the past two decades.

Globally, the United States remains the largest, single uniform market with no restrictions on interstate commerce in the world. Despite recent rhetoric of domestic protectionism (Herbst 2009), global trade rules (WTO 2008) have removed significant trade barriers over the past several decades. Also, comparative cost advantages and, until recently, favorable exchange rates, have made the United States the leading net importer of goods and services for the last 37 years. In 2006, the United States' trade deficit reached a record \$753 billion (U.S. Census Bureau 2009a) while the U.S. currency has reached historical lows. Last year, the U.S. Dollar reached parity to the Swiss Franc for the first time ever and fell below €1.56 (NZZ 2008). The U.S. Dollar depreciation combined with a general sense that a sizeable, sustainable recovery of the U.S. Dollar will not happen soon is expected to lead to adjustments in global trade patterns (Economist 2008). In fact, prior to the global economic slowdown, U.S. exports in January 2008 were up almost 17 percent over exports a year earlier (Aeppel and Slater 2008).

While U.S. manufacturers are gaining some breathing room from the currency adjustments, the imploding U.S. housing market and the financial market turmoil presents formidable challenges to the nation's economy (Greenspan 2008). As shown in **Figure 1**, new single-family housing sales in 2008 fell to 485,000 from their peak in 2005 (1,283,000, −62%) and existing home sales fell from 6,180,000 in 2005 to 4,350,000 in 2008 (−30%, NAHB 2009). The trends shown in **Figure 1** have continued into 2009. Annualized single-family housing starts in May 2009 fell to 401,000, a 41 percent drop compared to May 2008 (NAHB 2009). Housing is a critical industry segment to the U.S. economy and to the forest products industry in particular since housing accounts for 20 percent of U.S. economic activity (4% to 5% directly and an estimated 15% indirectly; Joint Center for Housing Studies 2002) and approximately 70 percent of structural lumber and panel product sales (Schuler and Adair 2003). The interdependence between housing activity and furniture sales is less clear-cut; however, there is general agreement that household furniture sales are derived primarily from new housing and remodeling activity (Majumdar 2004, AP 2007). Interestingly, in the current economic cycle, furniture markets slowed before the peak of the housing market in 2006, putting further pressure on the remaining domestic household furniture manufacturers (Scheffer and Payne 2008).

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This paper was received for publication in April 2009. Article No. 10614.
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Forest Prod. J. 59(9):20–28.

Global competition has shaped the U.S. household furniture industry more profoundly than the current economic slowdown (Fishman 2005, Buehlmann et al. 2008). The U.S. nonupholstered wood household furniture manufacturing industry segment, in particular, has lost significant market share to imported furniture (Schuler et al. 2001; Buehlmann and Schuler 2002; Nwagbara et al. 2002; Becker 2003; Schuler and Buehlmann 2003, 2008a; Buehlmann et al. 2004; Quesada and Gazo 2006) while other segments of the U.S. furniture industry, such as kitchen cabinets, office furniture, or institutional furniture, have been less affected by imports. In 2001, Schuler et al. described the problems that domestic nonupholstered wood household furniture manufacturers faced, "*despite one of the best housing markets in over 20 years* (pp. 15)." According to Schuler et al. (2001), the U.S. trade imbalance for the nonupholstered wood household furniture sector between 1990 and 2000 increased by nearly 400 percent, mainly due to import growth from Asia, Canada, and Mexico, coupled with stagnant domestic production. Acknowledging the problem, Buehlmann and Schuler (2002) and Schuler and Buehlmann (2003) called for the industry to consider a paradigm shift. In particular, they suggested that the industry adapt a new strategic business model involving mass customization (Lihra et al. 2005, 2008), strategic supply chain alliances (e.g., outsourcing), lean manufacturing, standardization, and modular construction of furniture, as well as changes in the way furniture are sold and serviced at customers' homes (Lihra et al. 200xb, Oh et al. 2008). Nwagbara et al. (2002), Becker (2003), and Quesada and Gazo (2006) wrote about the impact of increased imports of wood household furniture on the U.S. economy, about labor layoffs, plant closings, and the impact on regional and local economies. Indeed, the decline of domestic household furniture manufacturing has affected the entire furniture supply chain, most severely the hardwood lumber industry (Grushecky et al. 2006, Buehlmann et al. 2007, Luppold 2007). Today, the furniture industry segment accounts for less than 1 billion board feet (BBF) of hardwood lumber sold annually, after having consumed more than 2.5 BBF in the late 1990s. While hardwood lumber consumption domestically has shifted to industrial (pallets) and construction/remodeling uses (Luppold 2007), hardwood lumber exports have increased by 14 percent between 2002 and 2007 (Schuler and Buehlmann 2008b). U.S. hardwood log exports increased even faster, rising by 80 percent between 2002 and 2007 (Schuler and Buehlmann 2008b). Most notable, the People's Republic of China (P.R. China) has increased its log imports from the United States between 2002 and 2007 by 328 percent, from $45 million in 2002 to $190 million in 2007 (Schuler and Buehlmann 2008b).

The state of the U.S. furniture industry has implications for the future of the entire hardwood value chain. This study, following a brief look at globalization and the U.S. forest products industries, provides an assessment of the U.S. furniture industry (NAICS 337), in particular the Upholstered Household Furniture (NAICS 337,121) and the Nonupholstered Wood Household Furniture Manufacturing sector (NAICS 337,122) and discusses implications for the hardwood supply chain. The paper concludes with a discussion of the "state of the industry," where a case is made that, perhaps, we are currently at a turning point where the domestic industry may start recapturing manufacturing capacity moved offshore over the past two decades.

Globalization and the U.S. forest products industries

Over the last 30 years, growing global trade has impacted the flow and the source, conversion, and consumption of forest products. While world exports of primary forest products, e.g., round wood, fuel wood, sawn wood, wood-based panels, and pulp and paperboard, was $50 billion in 1980, it quadrupled by 2006 to $200 billion (FAOSTAT 2008). At the same time, however, the share of the United States in the global primary forest products trade decreased from 13 percent in 1980 to less than 10 percent in 2006 (**Fig. 2**).

While the U.S. share of global trade in forest products has declined due to increased cross-border activities among other nations, imports of primary and secondary forest products to the United States has increased in virtually all product categories. Thus, the share of domestic consumption supplied by domestically manufactured products has decreased. From 1990 to 2008, the share supplied by domestically produced paper and paper board decreased from 85 to 84 percent, hardwood and softwood moulding from 87 to 63 percent and most significantly, household nonupholstered furniture from 78 to 36 percent (U.S. Census Bureau 2009c, USDA-FAS 2009). **Figure 3** shows the share of domestically produced forest

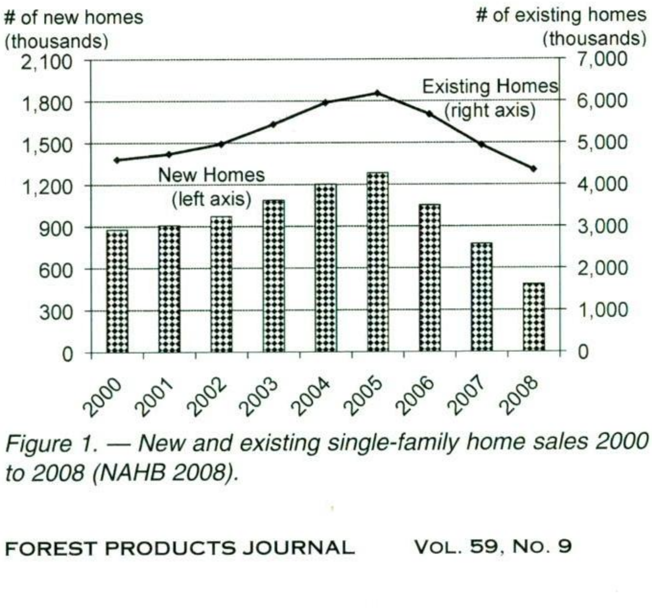

Figure 1. — New and existing single-family home sales 2000 to 2008 (NAHB 2008).

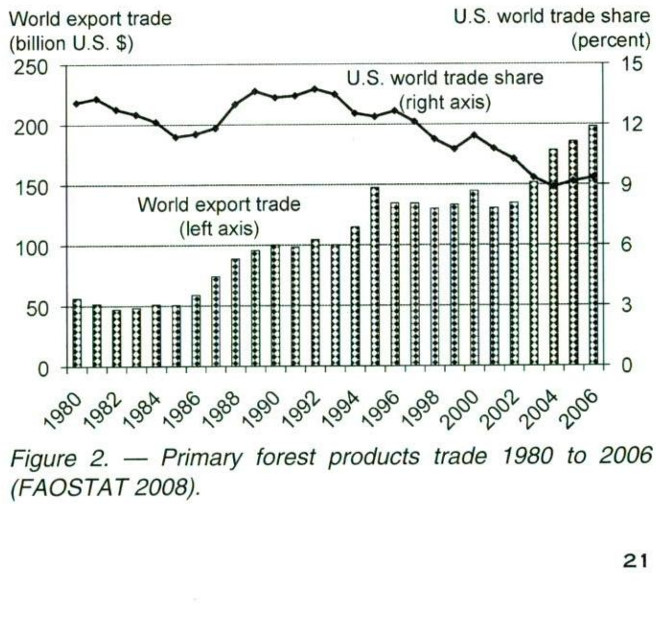

Figure 2. — Primary forest products trade 1980 to 2006 (FAOSTAT 2008).

products for 1990 and 2008 (data for flooring and mouldings are for 1990 and 2006).

The demise of U.S. household furniture manufacturing has greatly affected the hardwood lumber industry. While furniture manufacturing was by far the largest single user of graded hardwood lumber until 1997, it had fallen behind kitchen cabinets, flooring, millwork, and exports by 2005 (Luppold 2007, Huber 2008). Graded hardwood lumber production in the United States fell from 7.5 BBF in 1999 to 6.4 BBF in 2007 (−15%) and is below 3 BBF at the present time. In the past, individual firms could rely on domestic sectors such as kitchen cabinet, millwork, or flooring to replace some of the decreasing hardwood lumber demand by the furniture sector (Grushecky et al. 2006, Buehlmann et al. 2007). Today, however, these sectors are struggling and exports have also decreased.

Exports of hardwood lumber and logs from the United States have increased dramatically over the past decades. Exports of graded hardwood lumber increased by a thousand percent between 1963 and 2005 and hit 1.3 BBF or 19 percent of total graded hardwood lumber consumed in 2005 (Luppold 2007). As the quantity of hardwood material exported increased, the countries of landing shifted according to the market success of national wood products (furniture) manufacturers. While the P.R. of China ranked only 31st in hardwood lumber imports from the United States in 1995 ($5.9 million), it ranked second in 2007 ($222.2 million; USDA-FAS 2009). Taiwan, moving its economy away from wood products (furniture) manufacturing, dropped from being the number 5 importer of U.S. hardwood lumber in 1995 ($70.5 million) to number 20 in 2007 ($15.2 million). Vietnam, which did not import U.S. hardwood lumber in 1995, was ranked number 8 in 2007 ($65.2 million). U.S. hardwood log exports to countries such as the P.R. of China and Vietnam have seen even more pronounced growth. The P.R. of China imported $190 million worth of hardwood logs from the United States in 2007, up from $45 million in 2002 (+326%; USDA-FAS 2009), Vietnam imported $28 million in 2007, up 490 percent from 2002 ($4.7 million; USDA-FAS 2009). This data supports observations that these growing nations try to increase the value-added content of exported goods as a way to grow their economies and to produce needed by-products for their industries (wood composites, paper, energy, and others). **Figure 4** shows U.S. hardwood log and lumber exports to major trade partners from 1992 to 2007.

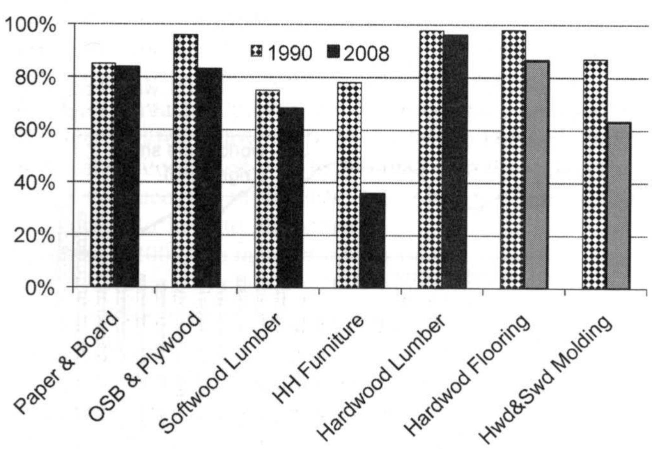

Figure 3. — Share of domestic markets supplied by domestic production, 1990 and 2008. (Data for flooring and mouldings are for 1990 to 2006; shipments U.S. Census Bureau 2009c, imports and exports USDA-FAS 2009).

Vietnam, which entered into a formal trade relationship with the United States in December 2001 (CIA 2008), seems to bring a new dimension to the future of global furniture manufacturing and trade. While furniture imports to the United States from Vietnam were only $1 million in 2002, they have reached $779 million in 2006, an astounding 800 percent increase in 5 years (Schuler and Buehlmann 2008a). Entire furniture manufacturing facilities dedicated to the U.S. market have been moved to Vietnam (Stickley, Inc. 2005) and industry experts talk of Vietnam as the "next China" (Hoffman 2007). This shift is supported by increasing labor costs in the P.R. of China (Adams and Shu-ling 2008) and a currency exchange rate that becomes less favorable for Chinese exporters (Dabroza 2008). But, even though Vietnam offers opportunities for U.S. wood products manufacturers, the country's size will limit its ability to replace the P.R. of China as a manufacturing powerhouse since Vietnam's labor pool is less than one-tenth the size of the Chinese (Bradsher 2008). Even so, as the following discussion shows, the comparative advantages offered by these Southeast-Asian nations have had a profound impact on the U.S. household furniture industry.

Current furniture and related product manufacturing in the United States

While the nonupholstered wood household furniture sector (NAICS 337,122) has been most severely impacted by the surge of imported furniture over the past decades (imports rising from 19% in 1992 to 64% marketshare in 2008; U.S. Census Bureau 2009c, ITA 2009), other members of the furniture and related product manufacturing (NAICS 337) sector have been better able to maintain their competitive position (Schuler and Buehlmann 2003). From 1992 to 2008, imports of upholstered household furniture (NAICS 337,121) grew from 5 to 28 percent, office furniture (NAICS 337,211) from 6 to 21 percent, and wood kitchen cabinet and countertop (NAICS 337,110) from 2 to 4 percent, respectively. **Figure 5** shows the increase of market share of imported furniture to the United States from 1992 to 2008.

While there have been few scientific studies to explain the difference in performance of these similar, yet different, industries, it is generally believed that the U.S. nonupholstered wood household furniture industry (NAICS 337,122) is the most conservative and, in many aspects, the least innovative of all of the industries involved in the furniture and related manufacturing sector (NAICS 337). But, other factors including domestic competition (determining margins and thus level of investments in plant, people and products), complexity of product and production, transportation costs, and wholesale and retail structures have also contributed to the varying losses of market share of U.S. furniture manufacturing sectors.

In 2006, U.S. furniture and related products manufacturers (NAICS 337) shipped $81 billion worth of products from their domestic manufacturing plants, up from $64 billions in 1997 (+26%, U.S. Census Bureau 2009b). In 2005, there were 20,722 U.S. establishments recorded under the NAICS 337 manufacturing sector, about the same number as in 1997

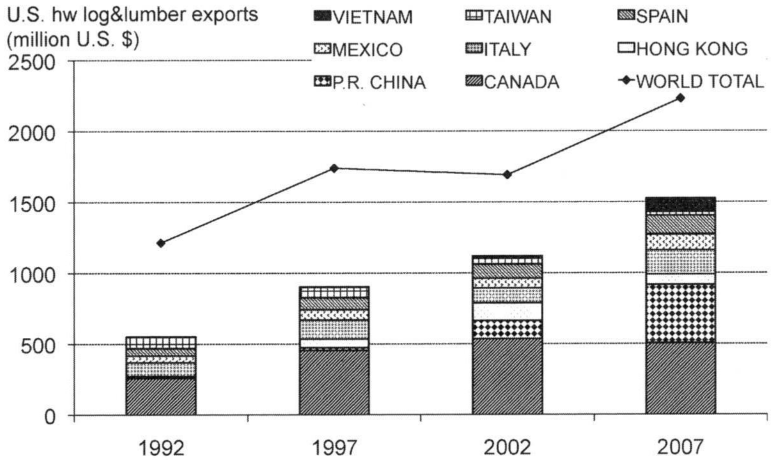

Figure 4. — Hardwood log and lumber exports from the United States to various countries 1992 to 2007 (USDA-FAS 2009).

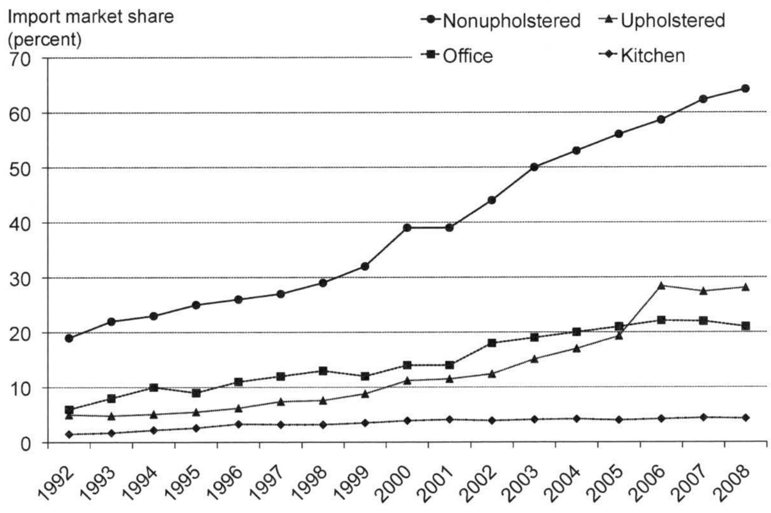

Figure 5. — U.S. market share of imports 1992 to 2008 (U.S. Census Bureau 2009c, ITA 2009 [consumption = shipments + imports − exports; import share − imports/consumption]). These market share computations are conservative since some imported components and OEM furniture is included in domestic shipments. This observation applies to all numbers regarding the value of domestic shipments throughout this manuscript.

(20,738). The number of employees for the sector decreased from 603,668 to 520,129 (−14%) between 1997 and 2006. While most furniture sectors lost employees between 1997 and 2006 (nonupholstered wood household furniture −44%; upholstered wood household furniture −12%; office furniture including fixtures −22%), the wood kitchen cabinet and countertop manufacturing sector added almost 50,000 jobs (+46%) and employed 145,013 individuals in 2006. The strong development of the wood kitchen cabinet and countertop manufacturing sector until 2007 is based on a multitude of factors, including the increasing importance of the kitchen in today's household, strong housing markets until 2006, innovative products and services, and considerable capital spending by the industry. As with all sectors related to residential construction, however, the wood kitchen cabinet and countertop-manufacturing sector is currently suffering a severe recession because of its dependency on new and remodeled housing construction activities.

Upholstered and nonupholstered wood household furniture manufacturing in the United States

Both, the U.S. Upholstered (NAICS 337,121) and the Nonupholstered (NAICS 337,122) Wood Household Furniture Manufacturing industry sectors have recently seen a surge in imported products taking over market share (**Fig. 6**) The Upholstered Household sector, however, has been able to limit the success of imported products more effectively than did the Nonupholstered Wood Household Furniture Manufacturing sector. Imports of Nonupholstered Wood Household Furniture surged from 19 percent of furniture shipped domestically in 1992 to 64 percent in 2008 while the domestic Upholstered Household Furniture manufacturers saw the share of imports rising from 5 percent in 1992 to 28 percent in 2008 (U.S. Census Bureau 2009c, ITA 2009). While different theories exist to explain this asymmetric development, a primary reason can be seen in the way these pieces are sold. Nonupholstered wood household furniture is mostly sold as a mass-produced product with a set of options, all of which are held in stock by the manufacturer, wholesaler, or retailer. Upholstered household furniture, conversely, typically allows customers to select the type and color of the fabric used, especially for upholstered items in the upper price categories. Thus, such furniture cannot be produced ahead but essentially are mass customized pieces that are assembled from prefabricated stock, after the customer has placed an order (Lihra et al. 2008). Thus, leadtime becomes critical and since speedy air transport of the product from an offshore location to the United States is too expensive, domestic manufacturers are in a more favorable position to defend their business.

Today, nonupholstered wood household furniture manufacturing (NAICS 337,122) is a global business that is continuously moving to the lowest production cost location. While the P.R. of China conducted less than $70 million of business in nonupholstered wood household furniture with the United States in 1992, the volume had grown to almost $4.5 billion in 2008, or to 44 percent of all imported nonupholstered furniture (ITA 2009). Vietnam is another "success" story regarding furniture exports, having grown its business to export furniture to the United States from $1 million in 1998 to more than $1 billion in 2008 (ITA 2009). While low production-cost regions, such as Southeast Asia, have

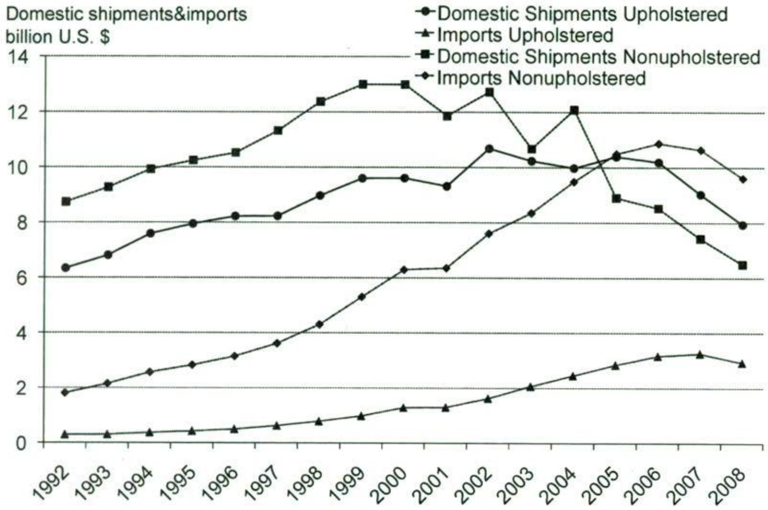

Figure 6. — Domestic shipments and total imports of upholstered and nonupholstered furniture 1992 to 2008 (U.S. Census Bureau 2009b, ITA 2009).

captured business, higher production cost manufacturing locations lost trade with the United States. Imports of nonupholstered wood household furniture between 2000 and 2008 decreased 32 percent from Canada, 21 percent from Mexico, and 35 percent from Italy (ITA 2009).

The nonupholstered household furniture (NAICS 337,121) trade deficit for the United States in 2008 was roughly $8.5 billion, with imports reaching $9.6 billion and exports being $1.1 billion. **Figure 7** shows the value of imported nonupholstered household furniture from the leading countries (P.R. of China, Canada, Vietnam, Malaysia, Indonesia, Italy, and Mexico), the total of all of the imports, and the value of domestic shipments. Due to the economic challenges facing the U.S. economy, imports of nonupholstered wood household furniture dropped by almost 10 percent in 2008 vs. 2007, with the P.R. of China losing 14 percent, Canada 20 percent, and Mexico 9 percent; Vietnam added 20 percent (ITA 2009).

When evaluating these official statistics, it is important to remember that the value of domestic shipments is actually overstated for all of the furniture industry segments due to the inclusion of imported components into domestically shipped products. Accounting for such imported components is difficult because in the statistics of the Foreign Trade Division (FTD 2008) imported components are listed as "Furniture Components of Wood – Imports" for NAICS 337, but are not broken down further to the industry's subsectors and domestic manufacturers may or may not subtract the value of those imported components from their value of shipments. In any case, imports of furniture components increased dramatically, from $316 million in 1997 to $1.2 billion in 2007 (FTD 2008). Thus, while the impact of imported components on domestic shipments by industry subsectors cannot be exactly quantified, the challenges faced by the domestic wood components industry may be a sign of the impact of such imports.

The domestic upholstered household furniture manufacturing sector (NAICS 337,121) has experienced less import pressure than the nonupholstered sector. Imports in 2008 were roughly 28 percent of U.S. value of shipments, or $3 billion (ITA 2009). As in the nonupholstered sector, however, the P.R. of China was by far the largest supplier of imported products, supplying 72 percent of all of the imports, followed by Mexico (7%), Italy (5%), Canada (4%), and Vietnam (3%). Between 2006 and 2007, the P.R. of China, Vietnam, and Indonesia increased their shipments to the United States by 9.1, 36.2, and 11.3 percent, respectively, while Italy, Mexico, and Canada all lost volume (−21.3%, −9.5%, and −15.3%, respectively; ITA 2009). **Figure 8** shows the value of imports by selected countries, total imports, and the value of domestic shipments for the upholstered furniture industry.

An interesting observation from the ITA data (2009) is that upholstered furniture imports from Nicaragua increased almost 2000 percent in 2008 from 2006, from $0.36 million in 2006 to $3.6 million in 2007 and to $6.6 million in 2008 (ITA 2009). While two observations do not make a trend, and imports from Nicaragua in 2008 were 0.3 percent of those from the P.R. of China, one cannot help but wonder if this is in response to increasing production and transportation costs in Southeast Asia or if other economic factors are behind Nicaragua's rise from obscurity. In any case, at present U.S. consumers are in no mood or in no position to spend on durable consumer goods decreasing the fortunes of domestic and foreign suppliers alike. At the same time, social trends such as the increasing sensibility of consumers for more environmentally friendly products are setting new priorities for the industry.

Future furniture production in the United States

Today, furniture manufacturing is a global business. Production of nonupholstered wood household furniture (NAICS 337,122) and upholstered household furniture (NAICS 337,121) are driven by labor and production costs, as are other, labor-intensive industries (e.g., apparel, shoe, toys). These industries constantly seek the lowest cost production location globally and abandon places with increasing cost structures. The increasing labor and production costs in the P.R. of China (Adams and Shu-ling 2008, Aeppel 2008) has forced the most cost-sensitive industries to seek lower cost labor and production locations, such as Vietnam or Cambodia (Hoffman 2007, Bradsher 2008). While containerized transportation has vastly increased efficiency of transporting goods globally and has thus reduced costs, increasing energy prices, lead time limits, capacity constraints, security issues, and labor unrests within the supply chain have increased costs and the potential of supply disruptions (Aeppel 2008, Areddy 2008, Rubin and Tal 2008, WSJ 2008). The U.S. Dollar, which has lost substantial value over the last 5 years vs. the currencies of its key trading partners (−15%, −45%, −8%, and −46%, against the Chinese Remimbi, the Euro, the Yen, and the Canadian and Australian Dollars, respectively, Federal Reserve Board 2008), no longer offers outsized advantages for most manufacturers functioning in other denominations (Dabroza 2008, NZZ 2008). While the lower

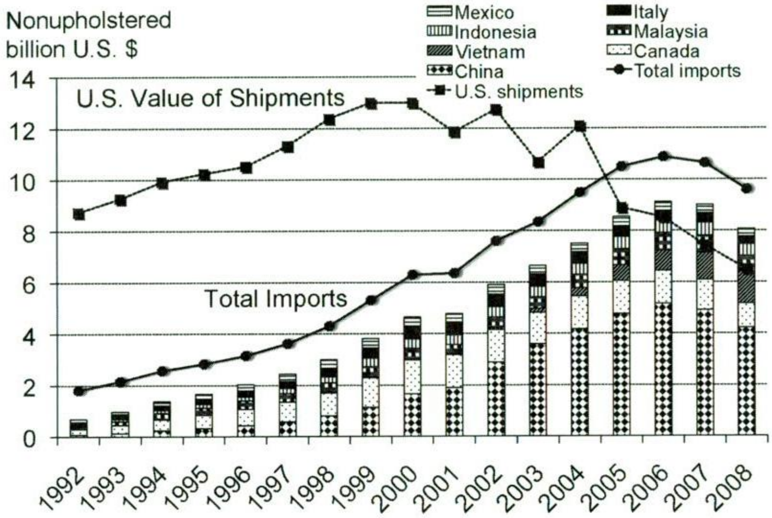

Figure 7. — Value of imported nonupholstered household furniture from selected countries, total of all imports and value of domestic shipments 1992 to 2008 (U.S. Census Bureau 2009b, ITA 2009).

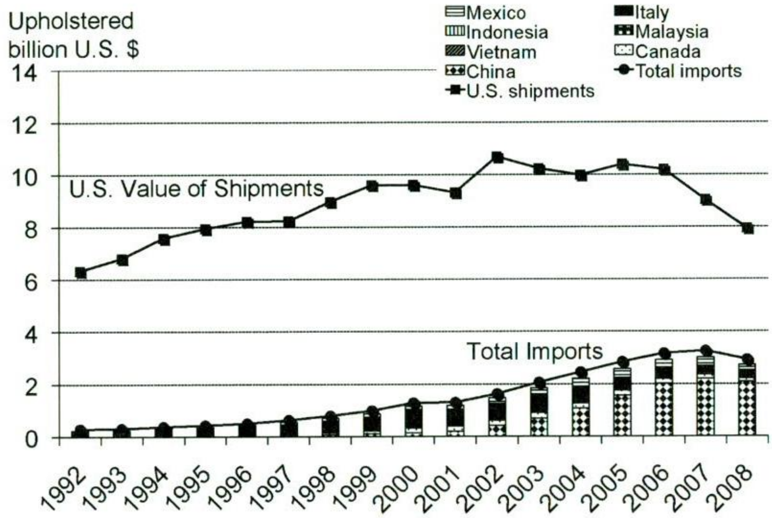

Figure 8. — Value of imported upholstered household furniture from selected countries, total of all imports and value of domestic shipments 1992 to 2008 (U.S. Census Bureau 2009b, ITA 2009).

value of the U.S. Dollar has helped U.S. exporters (Aeppel and Slater 2008, Economist 2008) and has limited the size of the nation's debt held by foreign creditors, it accelerated domestic inflation and supported a global increase in commodity prices (Browne and Cronin 2007, Lipsky 2008, Shenfeld and Grauman 2008). These unfavorable trends are currently mitigated by the economic challenges faced by the U.S. economy, where declining housing prices and the resulting financial market turmoil has brought the economy deep into recession territory and has depressed consumer spending and imports. Yet, despite growing nationalistic inferences with global trade (Davis 2008a, Herbst 2009) and calls for a more limited approach to global trade (Davis 2008b), global trade appears to remain a fundamental element of global economic growth and prosperity (Cowen 2008). Nonetheless, given the changing cost and risk structures of manufacturing in offshore locations, domestic manufacturers are revisiting their plans and finding that their manufacturing capacity in the United States may be important to remain competititve in the future (Hunter et al. 2008). Some are even taking back work sourced out to offshore locations to domestic manufacturing operations (Aeppel 2008, Engardio 2008, Rubin and Tal 2008). A paradigm shift may be evolving toward a more regional and local approach to manufacturing, offering opportunities for domestic manufacturers and the U.S. economy.

While the economic climate has adversely affected the furniture business for domestic and international manufacturers (Scheffer and Payne 2008), success stories exist. Bumgardner et al. (2007) report of the evolution of a furniture cluster in Ohio driven by small Amish furniture establishments (479 establishments, average of 7.2 employees (median = 4.0) per establishment) in the aggregate consuming an estimated 19 percent of all of the graded lumber produced in Ohio in 2005. The Amish manufacturers, taking advantage of the lack of other suppliers of such "handcrafted," customized furniture, using a reputation for high quality and the efficiencies offered by the evolving center of excellence, offer an example of successfully competing as a U.S.-based manufacturer in a global market. Another development to watch is Swedwood Danville, IKEA's fully owned manufacturing subsidiary (Froth 2007). A large buyer of supplies and services such as Swedwood brings furniture related interests to the region (Squires 2008). IKEA joins a region where some of the few remaining domestic furniture manufacturers are located. The addition of IKEA to the regional furniture cluster is likely to improve all industry participants' competitive position through strengthening the industry network of suppliers, service providers, education and research, and other specialized activities (Porter 1998). Indeed, the evolving furniture cluster in Southern Virginia has already sparked auxiliary efforts by industry, state, regional, and local governments to assure the success and growth of this opportunity (Engagement Matters 2008).

Industry clusters will prove crucial for the new generation of domestic furniture manufacturers. While furniture manufacturers were dominated by vertically integrated entities that sold their product mainly through traditional home furniture stores in the second half of the last century (**Fig. 9**), the increased division of labor among industry participants and streamlined supply chains brought forth a more focused furniture factory by the end of the last century (**Fig. 10**). This

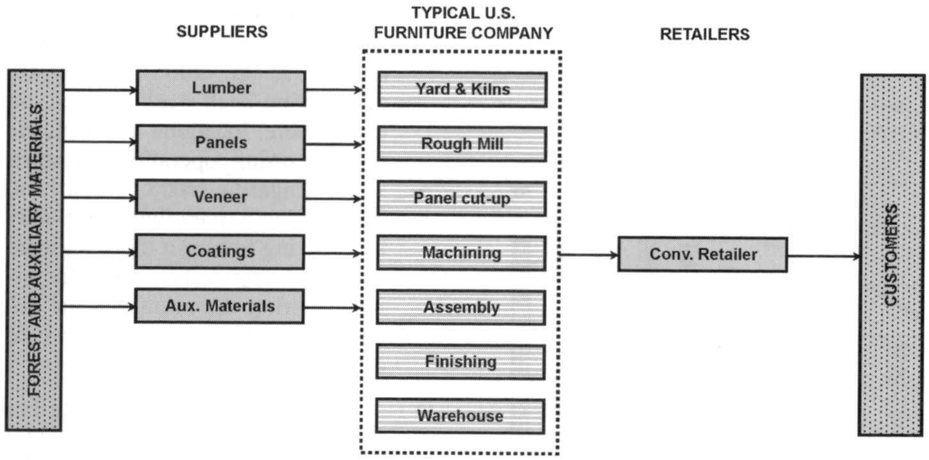

Figure 9. — Value chain of domestic furniture manufacturers in the middle of last century (ca. 1950 to 1990).

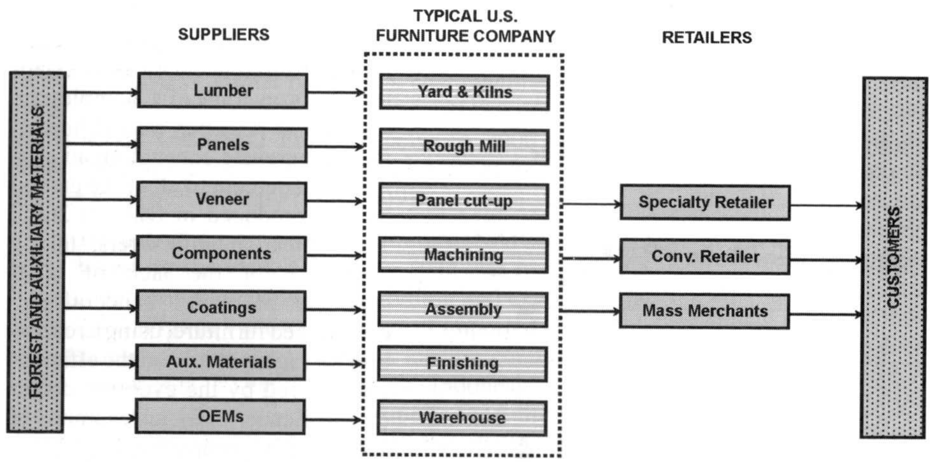

Figure 10. — Current value chain of domestic furniture manufacturers (ca. 1990 to 2010).

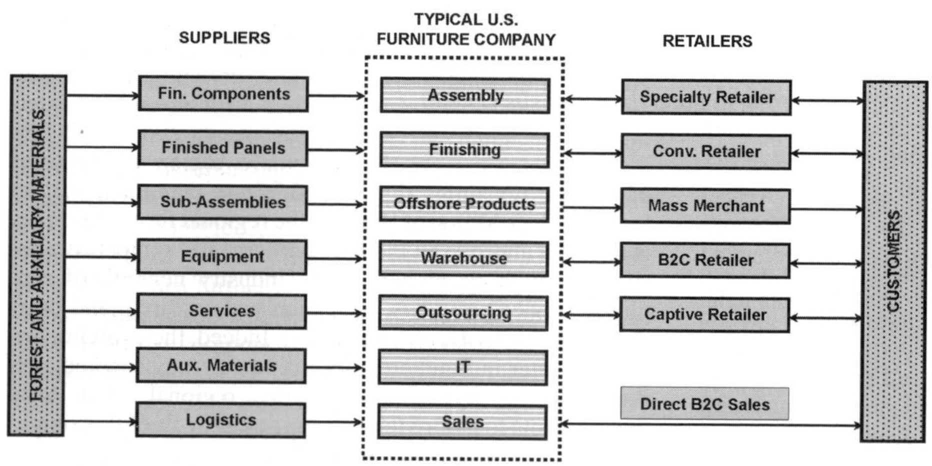

Figure 11. — Future value chain of domestic furniture manufacturers (ca. 2010-future).

more focused factory specialized on a narrower set of tasks such as furniture design, supply chain management, component assembly, and furniture finishing, as well as retailing. Indications exist that the future domestic furniture manufacturer will continue to increase its reliance on the supply chain as more tasks are outsourced, while becoming more engaged in the increasingly complex business of distributing and selling the company's product (**Fig. 11**). To that end, the successful furniture manufacturer of the future will have close links to the final customer to learn about customer preferences, to provide excellent service, and, potentially, to offer mass customized solutions.

In the future, furniture manufacturers will outsource more work to specialized entities, allowing themselves to focus on managing an efficient supply chain, building and improving efficient assembly and distribution operations and, most importantly, putting more resources into their report with customers. With the increase in sales channel diversity, retailing and marketing will require more resources and smart choices. Diversity in household furniture retailing is increasing and some sales have shifted from conventional household furniture retailers to mass merchants such as Wal-Mart or Target, to household stores such as Federated Department Stores or JC Penney, or manufacturer-owned stores such as Ashley, La-Z-Boy, IKEA or Ethan Allen (Sloan 2007, Ratnasingam et al. 2008). Additionally, new retail opportunities are becoming available with the advent of mass customized production (Lihra et al. 2008). While mass customization will require significant changes in the furniture manufacturing process, managing the customer relationship may turn out to be the more challenging endeavor (Lihra et al. 200xa). Successful furniture manufacturers thus may become similar to successful car manufacturers, where success is heavily dependent on marketing and guaranteeing quality products tailored to the consumers' taste at a reasonable and competitive price. Manufacturers will also have to respond to customers who are becoming more sensitive to environmental issues, thus opening opportunities in the green product categories (Schlegelmilch et al. 1996, Vlosky et al. 1999, Veisten 2007). Export markets show promise as well, as newly affluent citizens in developing countries such as the P.R. of China, India, Russia, and other countries around the globe have selected American furniture as one of their status symbols (Scelfo 2007). U.S. manufacturers also should keep in mind that, in developed countries, where the tertiary economic sector (e.g., the service sector) employs more than 75 percent of its workforce, value-added services have to be part of a successful product offering. Successful manufacturers will figure out how to serve their customers with special services starting with selling, designing, engineering, delivering, maintaining, upgrading, and disposing of their product (Schuler and Buehlmann 2003).

Current economic developments (rising energy and transportation price; labor and production, cost increases in offshore countries; exchange rate fluctuations; supply chain risks and concerns about reliable product availability; mass customization; green and carbon neutral products; growing export markets; emergence of the service economy; among others) have rearranged the equation for profitable furniture manufacturing. Manufacturers that are left with no domestic capacity may now be at a disadvantage compared to those that kept at least part of their capacity at home. Whatever the situation of particular manufacturers, none will succeed without good leadership, a clear vision, and sound strategic planning.

Conclusions

The current economic recession is putting a heavy burden on all sectors of the U.S. economy, including the U.S. furniture industries (NAICS 337). Offshore competition of domestic manufacturers, however, has an even more profound impact on the success of the domestic industries. While in the wood nonupholstered household furniture industry segment (NAICS 337,122), foreign competitors held 64 percent of the U.S. market in 2008, only 28 percent, 21 percent, and 4 percent of the upholstered household furniture (NAICS 337,121), the office furniture (NAICS 337,211), and the wood kitchen cabinet and countertop (NAICS 337,110) market volumes were supplied by foreign outlets, respectively. This variable performance of different industry segments is attributable to numerous underlying reasons, some self-created by the industry, others external.

Signs exist that the U.S. furniture industry may have opportunities to slow, stop, or even overturn its recent decline. Offshore manufacturers, by far the most successful locations to capture market share over the last 10 years, are struggling with numerous issues which are likely to increase their cost of production. Currency developments are also working against those regions, as are worries about transportation costs and product safety. Domestically, the United States has seen an increased interest in environmentally sustainable, carbon neutral, green product demand. Local production also finds renewed interest as it serves both the increased interest in green, certified products and increased expectations of customers with respect to the customization of the product they are willing to buy. An argument can be made that opportunities exist for the U.S. furniture manufacturing industry to recreate what was once a proud part of the industrial landscape in the United States.

Acknowledgments

The authors thank Gavin Wherry, Graduate Student at Virginia Tech for his valuable support in gathering data. The authors also thank two anonymous reviewers for their helpful comments. This research was supported by the USDA Forest Service's Northern Research Station Forest Sciences Laboratory in Princeton, West Virginia, Virginia Tech, and Virginia Cooperative Extension, Blacksburg, Virginia.

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